

**REMARKS**

This amendment is responsive to the Office Action mailed February 27, 2009, which was made final. Applicants respectfully request entry of this paper and allowance of the application with the amendments set forth herein, which are respectfully submitted to require no further searching and to place the application into condition for immediate allowance with only cursory examination.

**Status of the Claims**

The Office Action reports examination of claims 4-7, 9-12, 14-17, and 21-23.

Claims 4-7, 9-12, 17, and 21-23 stand rejected under 35 U.S.C. § 112, second paragraph for certain alleged indefiniteness.

Claims 4, 21, and 22 stand rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Kalender et al., "Dose reduction in CT by anatomically adapted tube current modulation. II. Phantom measurements", Medical Physics vol. 26 no. 11, pp. 2248-53 (1999) (hereinafter "Kalender") in view of Popescu et al., U.S. Pat. No. 5,867,555 (hereinafter "Popescu").

Claim 11 stands rejected under 35 U.S.C. § 103(a) as allegedly unpatentable over Kalender in view of Popescu in further view of Gies et al., "Dose reduction in CT by anatomically adapted tube current modulation. I. Simulation studies", Medical Physics vol. 26 no. 11, pp. 2235-47 (1999) (hereinafter "Gies").

Claims 14-16 are allowed.

Claims 5-7, 9, 10, 12, 17, and 23 are not rejected under § 102 or under § 103, and accordingly are understood to present patentable subject matter albeit with certain indefiniteness alleged under § 112, second paragraph.

**The claims present patentable subject matter  
and should be allowed**

**Claims 14-16** are allowed.

**Claims 5-7, 9-12, and 17** are understood to be in condition for allowance except for informalities in claim 5 alleged under the § 112, second paragraph rejections. Applicants have amended claim 5 to clarify as follows.

First, the sub-paragraph at lines 7-12 has been amended to read:

estimating a constant of proportionality relating:  
(i) x-ray current of the x-ray radiation source and  
(ii) attenuation of radiation raised to a selected power,  
the constant of proportionality being estimated based on the initial  
transmission tomographic imaging data acquired in the initial revolution;

This sub-paragraph is reciting the estimating of a constant of proportionality. The phrase "attenuation of radiation" is recited as part of the relationship, and does not provide antecedent basis for any other phrase in the claim. This is why it is recited without any article (neither "a" or "an" nor "the" or "said").

The phrase "the estimated attenuation of radiation" in the sub-paragraph at lines 17-20 finds antecedent basis in the sub-paragraph at lines 13-16. To clarify, the sub-paragraph at lines 17-20 is amended to read as follows:

prior to acquiring tomographic imaging data at the  
upcoming position or angular bin, adjusting a level of radiation produced  
by the x-ray radiation source by adjusting the x-ray current proportional to  
the estimated attenuation of radiation for the upcoming position or  
angular bin raised to the selected power using the estimated constant of  
proportionality.

This finds antecedent basis in the phrase "an estimated attenuation of radiation for an  
upcoming position or angular bin of the revolving radiation source" which is recited  
in the preceding sub-paragraph at lines 13-16.

It is respectfully submitted that any indefiniteness in claim 5 has been  
resolved by these amendments. There is no other pending rejection of claims 5-7,  
9-12, and 17. Accordingly, it is respectfully submitted that claims 5-7, 9-12, and 17  
are in condition for immediate allowance with no further searching and with only  
 cursory examination.

**Independent claim 21 and dependent claims 11 and 23** are canceled.

**Dependent claim 4** has been placed off of allowed claim 14, and  
accordingly should also be allowed.

**Dependent claim 22** has been placed off of allowed claim 15 and amended for consistency therewith and to remove any indefiniteness, and accordingly should also be allowed.

Based on the foregoing, it is respectfully submitted that all remaining claims 4-7, 9, 10, 12, 14-17, and 22 are in condition for immediate allowance without further searching and with only cursory examination. Accordingly, Applicants earnestly request allowance of the application including all claims 4-7, 9, 10, 12, 14-17, and 22.

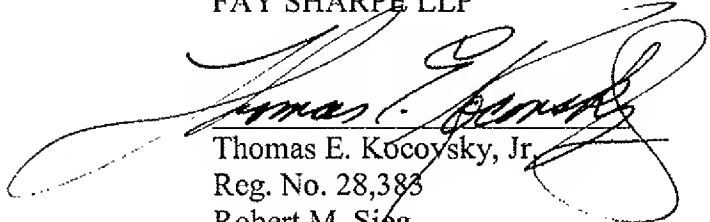
**CONCLUSION**

For the reasons set forth above, it is respectfully submitted that claims 4-7, 9, 10, 12, 14-17, and 22 (that is, all claims) are in condition for immediate allowance without further searching and with only cursory examination. An early allowance of all claims is earnestly requested.

In the event that personal contact is deemed advantageous to the disposition of this case, the Examiner is requested to telephone the undersigned at (216) 363-9000.

Respectfully submitted,

FAY SHARPE LLP

A large, stylized handwritten signature in black ink, which appears to read "Thomas E. Kocovsky, Jr.", is written over the printed name and address.

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